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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/787,982	03/22/2001	Herbert Ulrich	879.155USWO	1258

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EXAMINER	
DEL SOLE, JOSEPH S	

ART UNIT	PAPER NUMBER
1722	

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/787,982	ULRICH, HERBERT	
	Examiner	Art Unit	
	Joseph S. Del Sole	1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 March 2005 and 08 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *23-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *23-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/14/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 3/14/05 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the date of publication of the document cited has not been provided. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
(d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
(e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or

REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)

(f) BACKGROUND OF THE INVENTION.

(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(g) BRIEF SUMMARY OF THE INVENTION.

(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(i) DETAILED DESCRIPTION OF THE INVENTION.

(j) CLAIM OR CLAIMS (commencing on a separate sheet).

(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

2. The disclosure is objected to because of the following informalities: **a)** the specification does not contain the subject headings as required above and should be amended to include such therein.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 23-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 23-29 are vague and indefinite because they are replete with process limitations. Considering that each of these are apparatus claims, it is unclear what structural limitations the method limitations represent. The method limitations must be removed in order to clarify the entirely apparatus-limited intent of the claims. The

method limitations have no weight, and unless otherwise noted have not been considered. In clam 23, the limitations "the pipe-shaped stream of molten material is sucked up and thereby is adjusted to the desired outside diameter, a pre-cooling of the molten extrusion taking place in the vacuum suction bell," and "provision is made for measuring devices, which control the outside diameter of the molten extrusion, and that, depending on the desired outside diameter, the vacuum prevailing in the suction lock is set" are method limitations. In claim 24, the limitation "where the exact calibration of the outside diameter of the already partially-hardened pipe takes place through (by) a mechanical central adjustment" is a method limitation. In claim 25, the limitation "where the cooling down and hardening of the plastic pipe takes places through water spray" is a method limitation. In claim 29 the limitations from lines 11-16 (beginning "wherein by changing" and ending at the end of the claim) are method limitations.

Claim 24 is vague and indefinite because the limitation "through (by)" is unclear. Alternative language in such a format is unclear because it is not known whether the limitation is "through", "by", both or either.

Claim 25 recites the limitation "in the production direction" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 25 is vague and indefinite because it is unclear what structural positioning is represented by ""seen in the production direction" at line 2.

Claim 25 recites the limitation "the cooling down" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 23, 24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by GB (2 182 603).

GB (2 182 603) teaches a device for producing plastic pipes having an adjustable pipe head (Fig 2) connected to a vacuum suction bell (Fig 2, #29), which is equipped with a vacuum suction connection; a calibrating station (Fig 2, #19); and a vacuum calibrating bath (Fig 2, #20) connected with the calibrating station.

7. Claims 23, 24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Brambilla (5,468,442).

Brambilla teaches a device for producing plastic pipes having an adjustable pipe head (Fig 2, #3) connected to a vacuum suction bell (Fig 2, the feature containing #13), which is equipped with a vacuum suction connection (Fig 2, #13); a calibrating station (Fig 2, #14); and a vacuum calibrating bath (Fig 2, #2) connected with the calibrating station.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brambilla (5,468,442) in view of Chapman et al (6,153,132).

Brambilla teaches the apparatus as discussed above including a seal means (col 3, lines 26-31, the Examiner notes that a vacuum can not be achieved without some degree of a vacuum seal between the two areas of differing pressure).

Brambilla fails to teach measuring instruments operating with sensing tools resting on the outside wall of the pipe.

Chapman et al teaches a pipe extrusion system having measuring instruments operating with sensing tools to control the pipe diameter, the sensing tools resting on the outside wall of the pipe for the purpose of controlling tube diameter relative to velocities accurately (col4, lines 46-53).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Brambilla with a resting sensor as taught by Chapman et al because it enables accurate control of tube diameter.

12. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over GB (2 182 603) in view of Chapman et al (6,153,132).

GB (2 182 603) teach the apparatus as discussed above including a seal means (Fig 4, #30).

GB (2 182 603) fails to teach measuring instruments operating with sensing tools resting on the outside wall of the pipe.

Chapman et al teaches a pipe extrusion system having measuring instruments operating with sensing tools to control the pipe diameter, the sensing tools resting on the outside wall of the pipe for the purpose of controlling tube diameter relative to velocities accurately (col4, lines 46-53).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of GB (2 182 603) with a resting sensor as taught by Chapman et al because it enables accurate control of tube diameter.

13. Claims 27-29 rejected under 35 U.S.C. 103(a) as being unpatentable over Brambilla (5,468,442) in view of Wolfl et al (5,346,379).

Brambilla teaches the apparatus as discussed above including a seal means (col 3, lines 26-31, the Examiner notes that a vacuum can not be achieved without some degree of a vacuum seal between the two areas of differing pressure).

Brambilla fails to teach measuring instruments operating with sensing tools controlling the pipe diameter in a touch-free manner by means of sound or light sensors.

Wolfl et al teaches a pipe extrusion system having measuring instruments operating with sensing tools to control the pipe diameter, the sensing tools working by means of sound sensors for the purpose of controlling wall thickness (col 7, lines 40-55 and col 2, line 48).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Brambilla with an ultrasonic sensor as taught by Wolfl et al because it enables more precise control of the final product extruded.

14. Claims 27-29 rejected under 35 U.S.C. 103(a) as being unpatentable over GB (2 182 603) in view of Wolfl et al (5,346,379).

GB (2 182 603) teach the apparatus as discussed above including a seal means (Fig 4, #30).

GB (2 182 603) fails to teach measuring instruments operating with sensing tools controlling the pipe diameter in a touch-free manner by means of sound or light sensors.

Wolfl et al teaches a pipe extrusion system having measuring instruments operating with sensing tools to control the pipe diameter, the sensing tools working by means of sound sensors for the purpose of controlling wall thickness (col 7, lines 40-55 and col 2, line 48).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of GB (2 182 603) with an ultrasonic sensor as taught by Wolfl et al because it enables more precise control of the final product extruded.

15. Claims 27-29 rejected under 35 U.S.C. 103(a) as being unpatentable over Brambilla (5,468,442) in view of Boring (5,630,982).

Brambilla teaches the apparatus as discussed above including a seal means (col 3, lines 26-31, the Examiner notes that a vacuum can not be achieved without some degree of a vacuum seal between the two areas of differing pressure).

Brambilla fails to teach measuring instruments operating with sensing tools controlling the pipe diameter in a touch-free manner by means of sound or light sensors.

Boring teaches a pipe extrusion system having measuring instruments (Fig 3, #38) operating with sensing tools to control the pipe diameter, the sensing tools working by means of sound sensors for the purpose of controlling wall thickness (col 5, lines 8 - 21).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Brambilla with an ultrasonic

sensor as taught by Boring because it enables more precise control of the final product extruded.

16. Claims 27-29 rejected under 35 U.S.C. 103(a) as being unpatentable over GB (2 182 603) in view of Boring (5,630,982).

GB (2 182 603) teach the apparatus as discussed above including a seal means (Fig 4, #30).

GB (2 182 603) fails to teach measuring instruments operating with sensing tools controlling the pipe diameter in a touch-free manner by means of sound or light sensors.

Boring teaches a pipe extrusion system having measuring instruments operating with sensing tools to control the pipe diameter, the sensing tools working by means of sound sensors for the purpose of controlling wall thickness and measuring such over the entire circumference (col 5, lines 8-21).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of GB (2 182 603) with an ultrasonic sensor as taught by Boring because it enables more precise control of the final product extruded.

Response to Arguments

17. Applicant's arguments filed 3/14/05 and 4/8/05 have been fully considered but they are not persuasive.

A rejection including GB (2 182 630) remains in this non-final Office action and response to the arguments directed at that reference will be addressed herein.

The Applicant argues that GB'603 does not teach a vacuum suction bell because the pipe 22 in chamber 29 has not yet reached its final diameter.

While the pipe may not have reached its final diameter, such is moot. The structure of an apparatus is not defined by the method of use, but rather by its physical properties. As claimed, GB'603 does teach a vacuum suction bell.

Correspondence

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Joseph S. Del Sole whose telephone number is (571) 272-1130. The examiner can normally be reached on Monday through Friday from 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Benjamin Utech, can be reached at (571) 272-1137. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for both non-after finals and for after finals.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from the either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).

Joseph S. Del Sole
May 16, 2005